

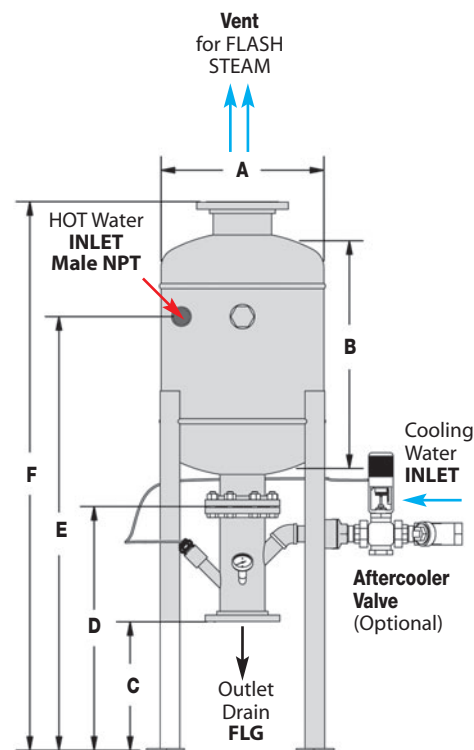
Carbon Steel

Model	BDS
Sizes	3/4", 1", 1 1/2", 2", 2 1/2"
Connections	150# RF
Body Material	Carbon Steel
PMO Max. Operating Pressure	150 PSIG
TMO Max. Operating Pressure	366°F
PMA Max. Allowable Pressure	150 PSIG @ 562°F

Note: Higher pressure units available; Consult factory.

Typical Applications

The **BDS Series Blowdown Separators** help maintain boiler efficiency and operation by safely disposing of blowdown water and dissolved solids when boilers are periodically blown down. Removing potentially harmful solids and scaling from the boiler reduces fouling and damage. The high pressure blowdown from the boiler is piped to the tangential inlet of the Blowdown Separator. The stainless steel strike plate and internal steel baffles direct the flow cyclonically to separate the water and solids which fall by gravity to the drain connection at the bottom. The flash steam generated from the high pressure blowdown water is quietly vented out of the top connection. An optional aftercooler package with temperature regulator is available to install off the bottom drain of the BDS. When blowdown begins the temperature regulator will open and allow cold water to temper condensate prior to discharge in municipal sewer.



How to Size / Order

Size standard 150 psig units to match BDS Inlet Size to boiler blowdown valve size. Use the Capacity Table to confirm Blowdown Condensate load is not exceeded.

See note regarding base conditions for Boiler Pressure, Blowdown Water Flow and Cooling Water temperature. Consult factory for sizing with alternate conditions.

Example: Boiler Operating Pressure: **150 PSIG**
Blowdown Valve Size: **1 1/2"**
Blowdown Condensate Load: **37,500 lbs/hr**

Actual Load does not exceed Capacity Table or 1 1/2" Inlet Connection

Therefore Choose: **16" Blowdown Separator with 1 1/2" Inlet**
Model Code: BDS-16-F150

Example Model Code with Optional Aftercooler:
BDS-16-F150-AC-20

BDS DIMENSIONS (inches)

Inlet Size	A	B	C	D	E	F
3/4"	12 3/4	26	13	27	48 1/2	59
1"	16	22	13	27	42 3/4	55
1 1/2"	16	36	13	27	48 1/4	62
2"	20	24	19	36	54	69
2 1/2"	24	36	19	36	65	81

MATERIALS

Shell	Carbon Steel SA-105
Frame	Carbon Steel
Strike / Wear Plate	Stainless Steel

PIPELINE ACCESSORIES

CONNECTIONS & CAPACITIES — inches								If Optional Aftercooler Valve is selected				
Tank Diameter	Model Code	Inlet Size	Vent Size	Drain Size	Length	Condensate lbs/hr	Flash lbs/hr	Suffix Code	Valve Part Number*	Cond. GPM	Cold Water GPM	Total GPM
12"	BDS-13-F150	3/4	3	3	26	11,000	1,793	AC-19	W91-05-08S15-CSS13U	22	10.8	32.8
16"	BDS-14-F150	1	4	3	22	15,000	2,445	AC-19	W91-05-08S15-CSS13U	30	10.8	40.8
16"	BDS-16-F150	1 1/2	6	4	26	40,000	6,520	AC-20	W91-05-08S15-CSS16U	80	54.2	134.2
20"	BDS-17-F150	2	6	6	24	70,000	11,410	AC-20	W91-05-08S15-CSS16U	140	54.2	194.2
24"	BDS-18-F150	2 1/2	8	6	36	100,000	16,300	AC-20	W91-05-08S15-CSS16U	200	54.2	254.2

Minimum 20 PSIG cold water pressure @ 60°F and max 150 PSIG boiler pressure

* Cooling valve included when aftercooler option is selected. Other options available, including max. quenching valve for continuous blowdown; Consult factory.